



Internal Audit Report

Department of Public Health

May 2001



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May 7, 2001

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We have completed our review of the Maricopa County Department of Public Health (DPH). The audit was performed in accordance with the annual audit plan that was approved by the Board of Supervisors. Overall, we found DPH operations to be effective and in compliance with applicable laws, regulations, and County policies. We also identified areas for improvement. These, along with our recommendations, are detailed in the attached report. The report highlights are:

- DPH does not routinely reconcile Pharmacy billings and drug returns with cash remittances and vendor credits.
- The lack of a perpetual inventory system at the Pharmacy weakens accountability for drugs.
- DPH does not have a comprehensive contingency plan to recover critical operations in the event of a disaster.

Attached is our report package, which includes a response from DPH. We have reviewed this information with DPH management and appreciate the excellent cooperation provided by the entire department. If you have questions or wish to discuss items presented in this report, please contact Eve Murillo at 506-7245.

Sincerely,

A handwritten signature in cursive script that reads "Ross L. Tate".

Ross L. Tate
County Auditor

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Executive Summary

Pharmacy Billings and Collections (Page 11)

The auditors examined numerous Maricopa County Department of Public Health (DPH) activities that did not lead to deficiency findings or recommendations. However, the auditors found that DPH needs to strengthen controls over Pharmacy activities in order to safeguard assets and detect errors. Control weaknesses identified include:

- DPH does not routinely reconcile Pharmacy billings to cash receipts records.
- DPH does not routinely reconcile vendor cash remittances and credits with Pharmacy drug return records.

DPH should reconcile amounts due to the Pharmacy for billings and vendor returns with cash receipts and vendor credits. Implementing these steps will improve accountability over resources.

Pharmacy Inventory Management (Page 13)

Pharmacy inventory procedures related to outdates, physical storage, transfers, and security are generally appropriate and adequate. However, the lack of a perpetual inventory system makes it difficult for DPH to detect inventory shrinkage, loss, or theft. In addition, approximately \$3.6 million of Title II drugs, provided by the State for DPH to distribute, is not recorded in the financial system or reported in financial statements as required by Generally Accepted Accounting Principles. DPH should consider implementing a perpetual inventory system and record and report drugs provided by the State.

Grant Reimbursements (Page 15)

During a recent three-month period, DPH did not ensure that federal grant reimbursements were requested in a timely manner.

Consequently, the County lost more than \$8,000 of interest earnings due to delayed drawdowns. DPH should make sure that technical problems and employee absences are resolved as soon as reasonably possible.

Public Records (Page 17)

Auditors sampled 200 storage cartons and found that ten (5%) were not adequately labeled with accurate destruction dates and appropriate disposal times. Inaccurate storage labeling can cause DPH record disposal inefficiencies, which could increase overall storage costs. DPH should implement policies and procedures that will ensure proper records maintenance.

Cash Deposits Security (Page 18)

Security over cash and checks transported between buildings is not adequate. DPH should strengthen security controls.

Operating System Security (Page 19)

Auditors identified numerous weaknesses related to DPH's operating system user account and password security. Best business practices require organizations to protect their computer networks. Weaknesses in user account and/or password security may result in unauthorized access. By completion of audit fieldwork, corrective action had been taken to correct some of the issues that were identified. DPH should take appropriate action to correct the remaining security weaknesses.

Patient Database Security (Page 20)

DPH's patient database application allows for separation of duties, which restricts user and patient information to appropriate employees. However, this system does not log incorrect login attempts. A minimum password length can not be set and the password can not be forced to expire. Unauthorized access resulting from weak application security to the database may compromise patient's

confidential data. DPH should enhance controls over application security.

System Recovery and Disaster Planning (Page 21)

DPH has a limited disaster recovery policy in place to minimize the risk of unplanned interruptions from hardware failure, volume corruption, data loss, and theft. However, DPH does not have a comprehensive contingency plan to recover critical operations in the event of a disaster. The patient database application is backed up prior to an upgrade, however, the actual data is not backed up. DPH should develop a comprehensive contingency plan and perform a complete backup of the application and data.

Introduction

Background

The Department of Public Health (DPH) is concerned with preventing and controlling diseases and promoting good health through community efforts. DPH provides clinical health services in instances where treating infected individuals is the best way to control the spread of disease to others.

DPH operates through the powers granted to the Board of Supervisors under Arizona Revised Statutes (ARS) 36-186 through 36-722. DPH's statutory mandated requirements are summarized below:

- Maintain and operate a system of vital records and public health statistics in conjunction with the statewide system
- Coordinate prevention, detection, and early intervention for communicable diseases
- Provide immunizations to school-age children
- Issue annual reports evaluating the health status of the population.

Advisory Board

An eleven member Board of Health (BOH) monitors DPH activities, serves as an advisory body to the Board of Supervisors, holds monthly meetings, and reviews monthly activity reports for all major DPH programs. The BOH advises the Board of Supervisors on policy issues and advises the DPH Director to address planning and policy issues.

Mission and Program Goals

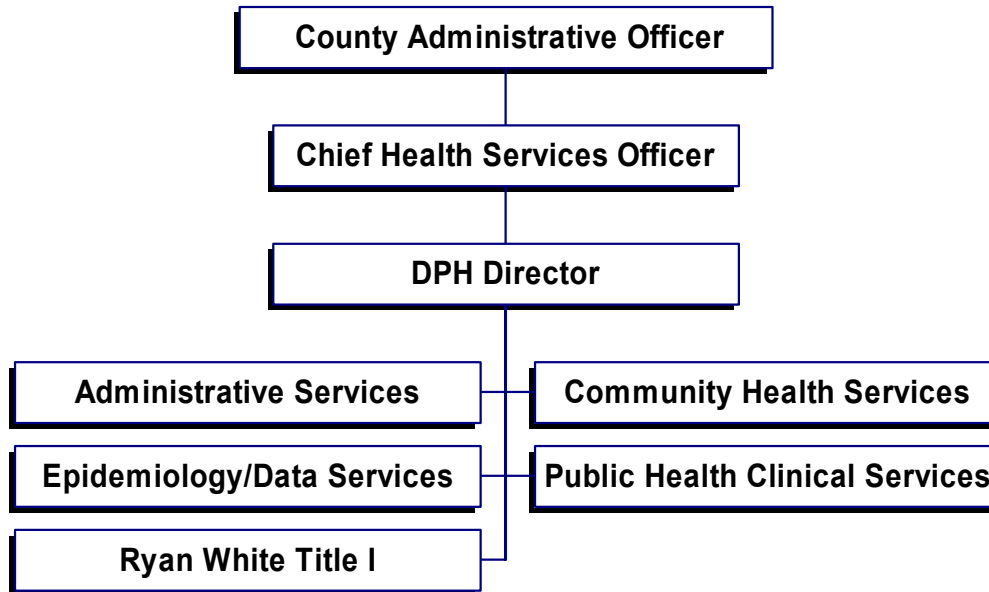
The mission of the Department of Public Health is to promote, preserve, and protect the health of people and communities in Maricopa County.

DPH has developed goals to:

- Improve community health status information
- Promote lifestyles that reduce risk of disability, death, and disease
- Develop, implement, and improve programs to prevent, control, eliminate and eradicate disease
- Maintain and enhance the administrative and operational infrastructure of the department.

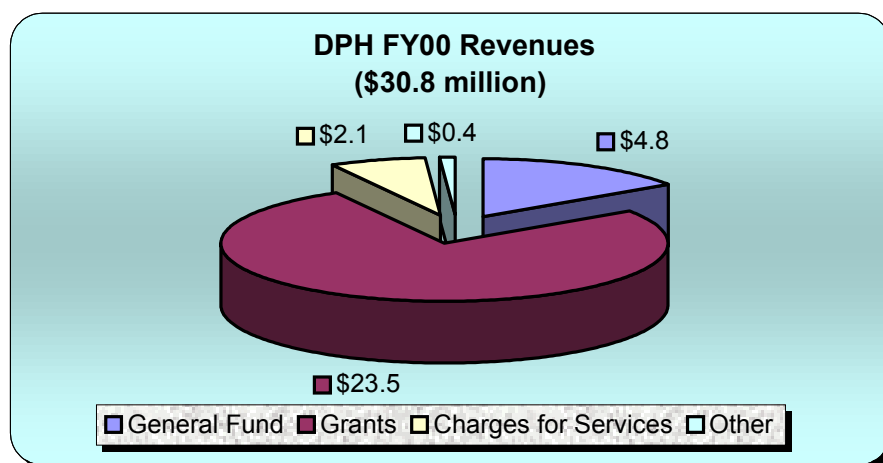
Organizational Structure

DPH is authorized 459 positions in the FY 2000-01 budget. The DPH organization is depicted in the chart below.

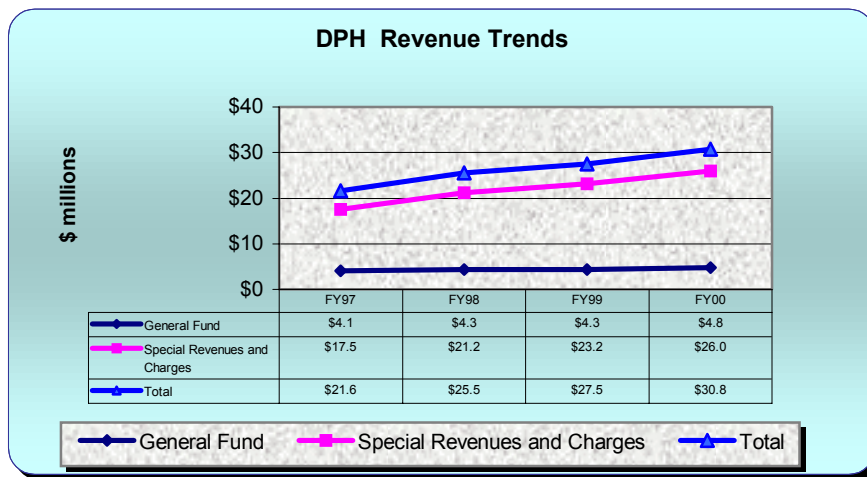


Funding

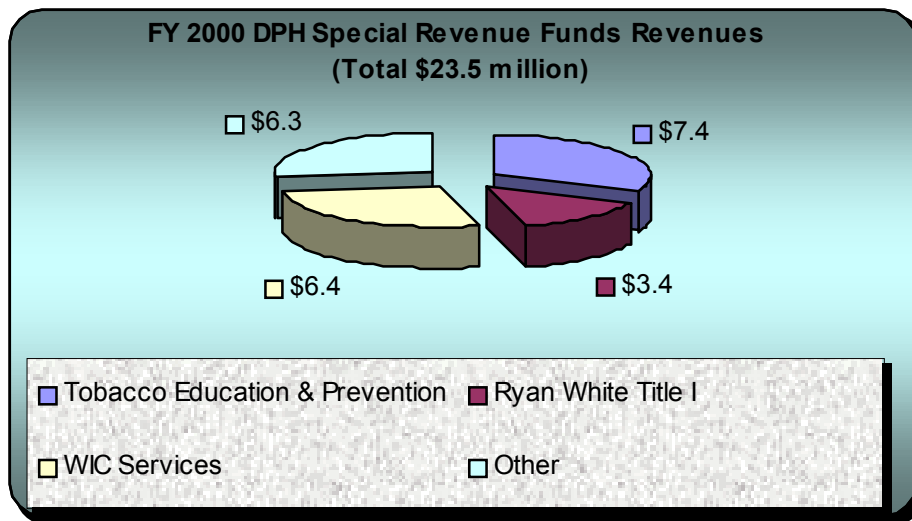
DPH operating revenues for FY 1999-2000 were \$30.8 million. These were funded primarily from grants and charges for services (Special Revenues) and also County General Fund appropriations.



The four-year revenue trend through FY 1999-2000 shows Special Revenue increases and relatively level General Fund appropriation revenue.



The three largest grant funded programs are Tobacco Education and Prevention, Ryan White Title I, and assistance to Women with Infants and Children (WIC) Services.



Location

DPH's main office is located at 1825 E. Roosevelt, Phoenix. The department also operates a clinic at 1201 W. Madison and 16 WIC clinics, mobile clinics, and educational facilities.

DPH administers over forty programs, including:

Disease Control

Cancer Screening
Communicable Disease Reporting
Hansen's Disease (Leprosy)
HIV/AIDS
Refugee Program
Sexually Transmitted Diseases
Tuberculosis (TB)

Health Maintenance

Family Planning / Prenatal Care
Nutrition / WIC / Food Plus
Immunizations
Oral (Dental) Health
Steps To a Healthy Heart
Tobacco Use Prevention (MACIUPP)
Promoting Lifetime Activity for Youth (PLAY)
AIDS Teens and Choices (ATAC)

Community Services

Children's Services
Domestic Violence
Homeless Care
Volunteer Opportunities

Other Services

Epidemiology / Data Services

HIPAA on the Horizon

Passed into law by President Clinton in 1996, HIPAA's (Health Insurance Portability and Accountability Act) full impact will be realized in two years when all health-care organizations, including state Medicaid programs, must comply with stringent regulations governing the electronic management of medical information or face severe penalties. The proposed HIPAA security standard states: "Each healthcare entity engaged in electronic maintenance or transmission of health information assess potential risks and vulnerabilities to the individual health data in its possession in electronic form, and develop, implement, and maintain appropriate security measures."

Industry experts have estimated that compliance activities to meet HIPAA requirements could cost three times as much as organizations' Y2K compliance efforts. DPH will be expected to comply by April 2003 or could face penalties up to \$250,000 and a maximum of ten years imprisonment for each breach of patient confidentiality. DPH should develop plans to deal with these regulations utilizing the Security Standards document that was provided to its office by the audit team.

Scope and Methodology

The scope of this audit focused on:

- Pharmacy operations
- Grants' cash management
- Revenue controls
- Contract oversight
- Records management
- Information systems

The international accounting and consulting firms of KPMG LLP and Deloitte & Touche LLP conducted the audit fieldwork. Deloitte & Touche conducted the examination of information systems and KPMG conducted the examination of all other work within the audit scope.

This audit was performed in accordance with Government Auditing Standards.

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Department-Reported Accomplishments

The following accomplishments were provided to the Internal Audit Department by Department of Public Health management for inclusion in this report.

Department of Public Health Accomplishments include the following:

- Maintained and managed Department expenditures at or below authorized budget levels.
- Increased the availability of public health services in FY00 with \$817,996 in new and expanded grants.
- Results from the Department's initial customer service survey found that 96% of those surveyed gave an excellent or good rating – 85% excellent and 11% good – when asked if the public health services met their needs.
- Based upon the results of the Department's employee satisfaction survey, the Department:
 1. Implemented a new employee orientation program
 2. Created a Reward and Recognition Team that planned and received approval for a department-wide employee recognition program
 3. Established a Career Development Team that placed job boards throughout the Department, sponsored brown-bag career opportunity lunches and is developing an internal mentoring and tuition reimbursement programs
- Coordinated with the Facilities Review Committee to gain approval for a new Public Health/Environmental Services building.
- Established performance measures for the Department's 45 different public health programs.
- Provided quality public health services on behalf of the citizens of Maricopa County. A sampling of the services provided by the Department of Public Health in FY00 and the volumes of clients served is illustrated below:
 - Immunizations Provided = 186,641
 - Communicable Disease Cases investigated = 2,213
 - STD Control Clients Served = 17,216
 - HIV Counseling and Testing Clients Served = 7,600
 - TB Control Clients Served = 28,660
 - Health Care for the Homeless and Patient Encounters = 19,976
 - Women, Infants and Children Client Encounters = 801,298
 - WIC Food Drafts Redeemed at Retail Grocers = \$39,386,063
 - Food Plus Food Packages Distributed = 78,164
 - Birth and Death Certificates Distributed = 218,644
 - Laboratory Tests Performed = 121,687
 - Pharmacy Prescriptions Filled = 40,645

Issue 1 Pharmacy Billings and Collections

Summary

The auditors examined numerous Maricopa County Department of Public Health (DPH) activities that did not lead to deficiency findings or recommendations. However, the auditors found that DPH needs to strengthen controls over Pharmacy activities in order to safeguard assets and detect errors. Control weaknesses identified include:

- DPH does not routinely reconcile Pharmacy billings to cash receipts records.
- DPH does not routinely reconcile vendor cash remittances and credits with Pharmacy drug return records

DPH should reconcile amounts due to the Pharmacy for billings and vendor returns with cash receipts and vendor credits. Implementing these steps will improve accountability over resources.

Applicable Requirements

Revenue and cash management processes include the policies, procedures, and controls that serve to bill, collect, deposit, and account for cash. These processes ensure that amounts due to the organization are collected quickly and accurately. Effective controls safeguard cash from fraud and errors and minimize opportunity costs. Controls should also be established that are adequate to verify that amounts billed are collected or investigated for errors

Review Results

DPH operations include filling prescriptions, billing third parties for prescriptions, and returning pharmaceutical inventories for refunds. The following findings identify revenue and cash collection improvements that can reduce the risks of loss through potential theft, errors, and unnecessary opportunity costs.

Pharmacy Billings Reconciled with Cash Receipts

FY 1999-2000 Pharmacy billings totaled \$700,000. KPMG found that the Pharmacy does not reconcile billings for medicines with money remitted to the Pharmacy through the PCS system (contracted claims processor that matches prescriptions with insurance benefits). As a result, the Pharmacy is not able to verify payments made for the medicines dispensed through the PCS system or identify potential errors in PCS remittance advices.

Vendor Returns Reconciled with Vendor Refunds

The auditors noted that the Pharmacy has not developed written internal policies and procedures related to safeguarding, tracking and reconciling pharmaceutical vendor return checks and credits. Moreover, the Pharmacy does not reconcile the amounts of refund checks and credits to records of drugs sent.

In addition, vendor checks and credits are sent to the Pharmacy instead of the DPH Finance Office. A good internal control environment requires that to deter losses, the inventory being returned should be tracked and reconciled to the remittances by an individual who does not have access to drug inventories. The Pharmacy estimates that \$4,000 to \$14,000 of supplies are returned to its vendors annually.

Recommendation

DPH should:

- A. Reconcile billings with remittances sent to the DPH Pharmacy through the PCS system
- B. Designate an individual who does not handle inventory returns to reconcile pharmaceutical returns to cash and credit remittance advises
- C. Complete and finalize policies and procedures over billings, collections and related reconciliations

Issue 2 Pharmacy Inventory Management

Summary

Pharmacy inventory procedures related to outdates, physical storage, transfers, and security are generally appropriate and adequate. However, the lack of a perpetual inventory system makes it difficult for DPH to detect inventory shrinkage, loss, or theft. In addition, approximately \$3.6 million of Title II drugs, provided by the State for DPH to distribute, is not recorded in the financial system or reported in financial statements as required by Generally Accepted Accounting Principles. DPH should consider implementing a perpetual inventory system and record and report drugs provided by the State.

Requirements and Review Results

Effective Pharmacy inventory controls are especially important because the dollar investment, the potential street value, and the attraction for abuse makes this asset inherently vulnerable. Each month, DPH processes approximately \$300,000 of Ryan White II drugs and \$16,000 of other pharmaceuticals.

Perpetual Inventory System

Although best practices recommend a perpetual inventory system for managing, tracking and managing inventories, DPH does not use a perpetual system. The auditors noted that DPH's software system would accommodate a perpetual system that includes automatic ordering. The setup and maintenance of a perpetual system is already included in software contract cost. Using a perpetual system would enable the Pharmacy to detect inventory shrinkage, loss and theft.

Recording Drugs Provided by State Pharmacy in Financial System

The auditors also noted that DPH does not record the Ryan White Title II drugs provided by the State (approximately \$3.6 million annually) in the County financial system, as required by Generally Accepted Accounting Principles.

Formalizing Policies and Procedures

DPH has drafted policies and procedures related to safeguarding, tracking and accounting for pharmacy inventories but these have not been officially approved. Formalizing such policies and procedures will support a strong internal control environment.

Recommendation

DPH should:

- A. Consider implementing a perpetual inventory system in order to allow the Pharmacy to monitor its inventory losses and shrinkage, as well as, strengthen inventory management
- B. Record the State issued Ryan White drugs in the County financial system
- C. Complete and formalize policies and procedures safeguarding, tracking, and accounting for pharmacy inventories

Issue 3 Grant Reimbursements

Summary

During a recent three-month period, DPH did not ensure that federal grant reimbursements were requested in a timely manner. Consequently, the County lost more than \$8,000 of interest earnings due to delayed drawdowns. DPH should make sure that technical problems and employee absences are resolved as soon as reasonably possible.

Requirements and Review Results

The Federal Government has established formal procedures over grant reimbursement requests. The auditors concluded that DPH complies with the requirements. KPMG noted, however, that only one individual makes federal drawdowns for applicable grants. When the individual is absent for an extended period, no one is designated to process the drawdowns timely. KPMG found, in one instance, that drawdowns had not been made for a three-month period resulting in approximately \$8,500 of lost interest earnings.

A summary of the referenced deferred drawdowns follows:

Month	Drawdowns	Associated Foregone Interest
Dec-99	\$ 549,243	\$ 6,865
Jan-00	191,948	1,600
Feb-00	<u>518,355</u>	<u>-</u>
Total	<u>\$1,259,546</u>	<u>\$ 8,465</u>

Recommendation

DPH should:

- A. Train a second person to perform federal grant drawdowns
- B. Utilize this back-up person, as needed, to ensure that federal grant drawdowns are processed in a timely manner.

Issue 4 Public Records

Summary

Auditors sampled 200 storage cartons and found that ten (5%) were not adequately labeled with accurate destruction dates and appropriate disposal times. Inaccurate storage labeling can cause DPH record disposal inefficiencies, which could increase overall storage costs. DPH should implement policies and procedures that will ensure proper records maintenance.

Applicable Requirements

Good records management is critical to DPH. Organization and retention of public records must comply with state requirements. In addition, individual medical records and mailing medicines require high levels of confidentiality

Review Results

DPH appears to have established appropriate controls for handling the retention and storage of public records. The auditors observed, however, that 10 (5%) of 200 storage cartons were not adequately labeled, including destruction dates and appropriate disposal times. In these cases, DPH is not compliant with the Maricopa County Records Management Policies and Procedures. The labeling deficiencies may cause DPH difficulties to access and dispose records in an efficient and orderly manner. The storage of unnecessary documents occupies valuable space and can result in additional costs to DPH.

Recommendation

DPH should:

- A. Consistently place labels on all storage cartons prior to storage in accordance with Maricopa County records retention policy
- B. Keep track of the destruction date of each record and dispose of records at the appropriate time.

Issue 5 Cash Deposits Security

Summary

Security over cash and checks transported between buildings is not adequate. DPH should strengthen security controls.

Review Results

The auditors noted that an unescorted individual carries cash and checks that sometimes exceed \$20,000 from one building to another. This practice increases the risk of theft and potential personal harm.

Recommendation

DPH should ensure that a security guard accompanies the individual responsible for transferring cash receipts from the cashier's safe to the administration building.

Issue 6 Operating System Security

Summary

Auditors identified numerous weaknesses related to DPH's user account and password security. Best business practices require organizations to protect their computer networks. Weaknesses in user account and/or password security may result in unauthorized access. By completion of audit fieldwork, corrective action had been taken to correct some of the issues that were identified. DPH should take appropriate action to correct the remaining security weaknesses

Federal Requirements

A combination of operating system and application security is required to properly restrict access to confidential patient information. Best business practices require organizations to protect their computer networks. Upcoming HIPAA legislation requires that all health-care organizations comply with stringent regulations to secure confidential patient information or face severe penalties.

NetWare Operating System Security

During our review, numerous weaknesses related to NetWare user account and password security were identified. User account and/or password security is inadequate and may result in unauthorized access to confidential patient information. Specific security vulnerabilities will be provided to DPH management under separate cover due to the sensitive nature of the information.

Recommendation

By the completion of the audit fieldwork, corrective action had been taken to correct some of the noted security deficiencies. We commend management for their prompt effort to correct the security weaknesses. DPH should correct the remaining security deficiencies to protect confidential patient information.

Issue 7 Patient Database Application Security

Summary

DPH's patient database application allows for separation of duties, which restricts user and patient information to appropriate employees. However, this system does not log incorrect login attempts. A minimum password length can not be set and the password can not be forced to expire. Unauthorized access resulting from weak application security to the database may compromise patient's confidential data. DPH should enhance controls over application security.

Necessary Controls

Access to the Acclaim patient database is very sensitive and should be closely monitored for unauthorized access attempts. Weak policies regarding the assignment of password privileges are frequently the root cause of fraud. Controls should be adequate to ensure access to the data is authorized, secure, and limited.

Security Weaknesses

Acclaim allows for separation of duties. This feature restricts user and patient information to appropriate employees. However, Acclaim does not log incorrect login attempts. A minimum password length can not be set and passwords can not be forced to expire. Unauthorized access resulting from weak application security to the database may compromise patient's confidential data. If user access is not properly authorized, users may be given excessive access to view or update confidential patient information

Recommendation

DPH should:

- A. Consider alternative security measures such as station restrictions to reduce the risk of access to the Acclaim database
- B. Make users aware of the sensitive nature of the data they have access to, and instruct them to secure their workstation when not in use
- C. Have network administrators remind users to change their passwords periodically and monitor for unauthorized access
- D. Research potential logging at the database level
- E. Research use of NDS (Network Directory Services) security capabilities as a potential compensating control

Issue 8 System Recovery and Disaster Planning

Summary

DPH has a limited disaster recovery policy in place to minimize the risk of unplanned interruptions from hardware failure, volume corruption, data loss, and theft. However, DPH does not have a comprehensive contingency plan to recover critical operations in the event of a disaster. The patient database application is backed up prior to an upgrade, however, the actual data is not backed up. DPH should develop a comprehensive contingency plan and perform a complete backup of the application and data.

Applicable Requirements

The General Accounting Office's (GAO) Federal Information System Controls Audit Manual (FISCAM) states, "An agency should have procedures in place to minimize the risk of unplanned interruptions and a plan to recover critical operations should interruptions occur". A contingency plan should be developed for restoring critical applications that include arrangements for alternative data processing and telecommunications facilities.

Review Results

While the DPH does have a limited disaster recovery policy in place to minimize the risk of unplanned interruptions from hardware failure, volume corruption, data loss, and theft, DPH does not have a comprehensive contingency plan to recover critical operations in the event of a disaster. The Acclaim application is backed up prior to an upgrade, however, the database is not backed up. DPH does not have assurance it can recover its systems timely in the event of a disaster.

If controls are inadequate, even relatively minor interruptions can result in lost or incorrectly processed data, which can cause financial losses, expensive recovery efforts, and inaccurate or incomplete financial or management information. System interruptions could also result in injuries or loss of life for operations involving health care or safety.

Recommendation

DPH should:

- A. Develop a comprehensive contingency plan to recover critical operations in the event of a disaster and test the plan periodically
- B. Perform a complete backup of the application and data before program changes are made

DEPARTMENT RESPONSE